

**WHAT IS CLAIMED IS:**

1. A method comprising:  
executing a first application on a cluster, the cluster comprising a plurality of nodes; and  
subsequent to the cluster being partitioned into a plurality of sub-clusters, a first one of the sub-clusters executing the first application, wherein a second one of the sub-clusters is capable of executing a second application.
2. The method of claim 1, wherein  
the first application executes on a first logical cluster, and  
if each of the nodes participating in the first logical cluster is included in the first one of the sub-clusters subsequent to the cluster being partitioned, the first one of the sub-clusters automatically wins ownership of the first logical cluster.
3. The method of claim 2, wherein  
subsequent to the first one of the sub-clusters winning ownership of the first logical cluster, one of the nodes is not allowed to join the first logical cluster unless the one of the nodes is comprised in the first one of the sub-clusters.
4. The method of claim 1, further comprising:  
executing a plurality of applications on the cluster, the plurality of applications comprising the first application and the second application; and  
subsequent to the cluster being partitioned into the plurality of sub-clusters, the second one of the sub-clusters executing the second application.
5. The method of claim 4, further comprising:  
the first one of the sub-clusters winning ownership of a logical cluster on which the first application is executed, wherein

prior to the first one of the sub-clusters winning ownership of the logical cluster, more than one of the sub-clusters each included a node that participated in the logical cluster.

6. The method of claim 5, further comprising:  
at least one of the nodes comprised in the logical cluster storing configured logical cluster membership information, which identifies which of the nodes were originally included in the logical cluster by an administrator of the cluster, and storing current logical cluster membership information, which identifies which of the nodes are included in the logical cluster subsequent to the first one of the sub-clusters winning ownership of the logical cluster.

7. The method of claim 6, further comprising:  
in response to communication being reestablished between the sub-clusters, one or more nodes automatically rejoining the logical cluster, wherein the one or more nodes are identified in the configured logical cluster membership information but not identified in the current logical cluster membership information.

8. The method of claim 5, further comprising:  
a sub-cluster of the more than one of the sub-clusters continuing to execute a third application of the applications subsequent to the first one of the sub-clusters winning ownership of the logical cluster on which the first application is executed.

9. The method of claim 5, further comprising:  
selecting the first one of the sub-clusters to win ownership of the logical cluster based on application-specific information associated with the first application.

10. The method of claim 9, wherein the application-specific information comprises information identifying each node configured to participate in the logical cluster on which the first application is executed.
11. The method of claim 9, wherein the application-specific information comprises information indicating that the first application is dependent on a third application of the applications; and the first one of the sub-clusters comprises a node that is configured to execute the third application.
12. A method comprising:  
detecting that a cluster has been partitioned into a plurality of sub-clusters, the cluster executing one or more applications, and one of the plurality of sub-clusters comprising a node; and  
determining whether the node can execute a first one of the applications based on application-specific information associated with the first one of the applications.
13. The method of claim 12, wherein the application-specific information identifies which nodes are part of a logical cluster on which the first one of the application is executing.
14. The method of claim 13, wherein the determining comprises:  
determining that the node can execute the first one of the applications if, subsequent to the cluster being partitioned, each of the nodes participating in the logical cluster is included in the one of the sub-clusters.

15. The method of claim 12, wherein the determining whether the node can execute the first one of the applications comprises:

accessing a coordinator resource if a second node in another one of the sub-clusters is part of a logical cluster on which the first one of the applications is executing.

16. The method of claim 12, wherein the application-specific information identifies whether the first application is dependent on a second application, the application-specific information indicates whether the node is configured to execute the second application.

17. The method of claim 12, further comprising: determining whether the node can execute a second application of the applications independently of determining whether the node can execute the first application.

18. A computer system comprising:  
a processor; and  
memory coupled to the processor, wherein the memory stores program instructions executable by the processor to:  
detect that a cluster has been partitioned into a plurality of sub-clusters, the cluster executing one or more applications, and one of the plurality of sub-clusters comprising a node; and  
determine whether the node can execute a first one of the applications based on application-specific information associated with the first one of the applications.

19. The node of claim 18, wherein the application-specific information identifies which nodes in the cluster are part of a logical cluster on which the first one of the applications is executing.

20. The node of claim 19, wherein the program instructions are executable to:

access a coordinator resource if a second node in another one of the sub-clusters is part of the logical cluster.

21. The node of claim 18, wherein the application-specific information identifies whether the first application is dependent on a second application, the application-specific information indicates whether the node is configured to execute the second application.

22. The node of claim 18, wherein the cluster manager is configured to determine whether the node can execute a second application of the applications independently of determining whether the node can execute the first application.

23. A computer readable medium comprising program instructions executable to:

detect that a cluster has been partitioned into a plurality of sub-clusters, the cluster executing one or more applications, and one of the plurality of sub-clusters comprising a node; and determine whether the node can execute a first one of the applications based on application-specific information associated with the first one of the applications.

24. The computer readable medium of claim 23, wherein the application-specific information identifies which nodes in the cluster are part of a logical cluster on which the first application is executing.

25. The computer readable medium of claim 23, wherein the program instructions are executable to:

access a coordinator resource if a second node in another one of the sub-clusters is part of the logical cluster.

26. The computer readable medium of claim 23, wherein the program instructions are executable to:

determine whether the node can execute a second application of the applications independently of determining whether the node can execute the first application.

27. A system comprising:

means for detecting that a cluster has been partitioned into a plurality of sub-clusters, the cluster executing one or more applications, and one of the sub-clusters comprising a node; and

means for determining whether the node can execute a first one of the applications based on application-specific information associated with the first one of the applications.